

**IN THE CLAIMS**

Please amend the claims as follows:

1. (Previously Presented) A system, comprising:  
a local area network management system to manage and configure a network of routers;  
a wide area network management system to manage and configure a network of switches;  
and  
address registration information to be appended to a message sent between a router of the network of routers and a switch of the network of switches over a connection between the router and the switch, wherein either the local area network management system or the wide area network management system uses the address registration information to map the network of routers and the network of switches by accessing each router in the network of routers and each switch in the network of switches.
2. (Original) The system of claim 1, wherein the address registration information comprises an interface index.
3. (Previously Presented) The system of claim 2, wherein the interface index comprises a slot number from which the message was sent.
4. (Previously Presented) The system of claim 2, wherein the interface index comprises a port number from which the message was sent.
5. (Original) The system of claim 1, wherein the address registration information comprises an Internet Protocol address.
6. (Currently Amended) The system of claim 1, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

7. (Previously Presented) The system of claim 1, wherein the router sends the message.
8. (Previously Presented) The system of claim 1, wherein the switch sends the message.
9. (Previously Presented) The system of claim 1, wherein the message is an enhanced local management interface message.
10. (Previously Presented) The system of claim 1, wherein the message is sent when the network of switches and the network of routers are first configured.
11. (Previously Presented) The system of claim 1, wherein the message is sent when the network of switches or the network of routers has a change in configuration.
12. (Previously Presented) The system of claim 1, wherein the message is sent at a regular interval.
13. (Cancel)
14. (Currently Amended) The system of claim 1 43, wherein the local area network management system configures the network of switches.
15. (Cancel)
16. (Currently Amended) The system of claim 1 45, wherein the wide area network management system configures the network of routers.

17. (Previously Presented) A method, comprising:
  - appending address registration information to a message;
  - sending the message between a router of a router network and a switch of a switch network; and
    - using the address registration information to map the router network from a wide area network management system controlling the switch network.
18. (Canceled)
19. (Currently Amended) The method of claim 17 or 18, further comprising configuring the router network using the wide area network management system.
20. (Original) The method of claim 17, further comprising using the address registration information to map the switch network from a local area network management system controlling the router network.
21. (Original) The method of claim 20, further comprising configuring the switch network using the local area network management system.
22. (Original) The method of claim 17, wherein the address registration information comprises an Internet Protocol address.
23. (Original) The method of claim 17, wherein the address registration information comprises an interface network.
24. (Previously Presented) The method of claim 23, wherein the interface index comprises a slot number from which the message was sent.

25. (Previously Presented) The method of claim 23, wherein the interface index comprises a port number from which the message was sent.

26. (Currently Amended) The method of claim 17, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

27. (Previously Presented) The method of claim 17, wherein the router sends the message.

28. (Previously Presented) The method of claim 17, wherein the switch sends the message.

29. (Previously Presented) The method of claim 17, wherein the message is an enhanced local management interface message.

30. (Previously Presented) The method of claim 17, wherein the message is sent when the network of switches and the network of routers are first configured.

31. (Previously Presented) The method of claim 17, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

32. (Previously Presented) The method of claim 17, wherein the message is sent at a regular interval.

33. (Previously Presented) A machine-readable tangible storage medium tangibly embodying a sequence of instructions executable by the machine to perform operations comprising:

    appending address registration information to a message;

    sending the message between a router of a router network and a switch of a switch network; and

    using the address registration information to map the router network from a wide area network management system controlling the switch network.

34. (Canceled)

35. (Currently Amended) The machine-readable tangible storage medium of claim 33 34, further comprising configuring the router network using the wide area network management system.

36. (Previously Presented) The machine-readable tangible storage medium of claim 33, further comprising using the address registration information to map the switch network from a local area network management system controlling the router network.

37. (Previously Presented) The machine-readable tangible storage medium of claim 36, further comprising configuring the switch network using the local area network management system.

38. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the address registration information comprises an Internet Protocol address.

39. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the address registration information comprises an interface index.

40. (Previously Presented) The machine-readable tangible storage medium of claim 39, wherein the interface index comprises a slot number from which the message was sent.

41. (Previously Presented) The machine-readable tangible storage medium of claim 39, wherein the interface index comprises a port number from which the message was sent.

42. (Currently Amended) The machine-readable tangible storage medium of claim 33, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

43. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the router sends the message.

44. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the switch sends the message.

45. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is an enhanced local management interface message.

46. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is sent when the network of switches and the network of routers are first configured.

47. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

48. (Previously Presented) The machine-readable tangible storage medium of claim 33, wherein the message is sent at a regular interval.

49. (Previously Presented) A system, comprising:  
a means for appending address registration information to a message;  
a means for sending the message between a router of a router network and a switch of a switch network; and  
a means for using the address registration information to map the switch network from a local area network management system controlling the router network.

50. (Original) The system of claim 49, further comprising a means for use the address registration information to map the router network from a wide area network management system controlling the switch network.

51. (Original) The system of claim 50, further comprising a means for configuring the router network using the wide area network management system.

52. (Canceled)

53. (Currently Amended) The system of claim 49 ~~52~~, further comprising a means for configuring the switch network using the local area network management system.

54. (Original) The system of claim 49, wherein the address registration information comprises an Internet Protocol address.

55. (Original) The system of claim 49, wherein the address registration information comprises an interface index.

56. (Previously Presented) The system of claim 55, wherein the interface index comprises a slot number from which the message was sent.

57. (Previously Presented) The system of claim 55, wherein the interface index comprises a port number from which the message was sent.

58. (Currently Amended) The system of claim 49, wherein the address registration information is sent in a data packet, wherein the data packet comprises spare bytes.

59. (Previously Presented) The system of claim 49, wherein the router sends the message.

60. (Previously Presented) The system of claim 49, wherein the switch sends the message.

61. (Previously Presented) The system of claim 49, wherein the message is an enhanced local management interface message.

62. (Previously Presented) The system of claim 49, wherein the message is sent when the network of switches and the network of routers are first configured.

63. (Previously Presented) The system of claim 49, wherein the message is sent when the network of switches or the network of routers has a change in configuration.

64. (Previously Presented) The system of claim 49, wherein the message is sent at a regular interval.

65-80. (Canceled)

81. (Previously Presented) A method, comprising:

- appending address registration information to a message;
- sending the message between a router of a router network and a switch of a switch network;
- using an address registration information to map the router network from a wide area network management system controlling the switch network;
- configuring the router network using the wide area network management system;
- using the address registration information to map the switch network form a local area network management system controlling the router network; and
- configuring the switch network using the local area network management system.